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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

GEORGE HIXON

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 130007-EI

April 1, 2013

Q. Please state your name and business address.

A. My name is George Hixon. My business address is 1729 Bailles Bluff Rd.,
Holiday, FL 34691.

Q. By whom are you employed and in what capacity?

A. I am employed by Progress Energy Florida (PEF) as Manager of Major Projects
in the Project Management and Construction (PMC) group.

Q. What are your responsibilities in that position?

A. My responsibilities entail major project planning and execution, including
oversight, construction, commissioning and start up. My primary duties involve
managing engineering activities to ensure project scope is accurate and
complete, providing input to estimate development, assisting in the development
of project execution and contracting strategies, and providing input to the overall
project schedules and oversight of construction execution. These duties are

COM 5
AFD 1
APA 1
ECO 1
ENG 4
GCL 1
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CLK 1-Group

1 relevant to projects that emerge from system planning and environmental
2 planning activities where specific projects are identified as viable projects that
3 will move forward into funding, contracting, design, construction and startup
4 phases. Our group generally accommodates projects in excess of \$50 million in
5 value.

6

7 **Q. Please describe your educational background and professional experience.**

8 A. I earned a BS in Civil Engineering from Clemson University in 1971. I have
9 been registered in the state of South Carolina as a Professional Engineer since
10 1981. Prior to my employment with PEF, I worked for different construction
11 and engineering firms in the United States ranging from a Field Engineer and
12 advancing to a Vice President of Projects. These projects included managing
13 major engineering design and construction projects in the Pulp and Paper, Power
14 and Heavy Industrial, and Cement plant construction markets both domestically
15 and internationally. In 2001, I became employed with Calpine Corporation as a
16 Senior Project Manager where I managed several gas turbine and steam turbine
17 projects. In May 2005, I was hired by PEF where I oversaw the construction,
18 commissioning and start up of projects. Project work with PEF includes
19 engineering management oversight for environmental retrofit projects and
20 repowering projects.

21

22 **Q. What is the purpose of your testimony?**

1 A. The purpose of my testimony is to provide an update on the Mercury and Air
2 Toxics Standards (MATS) - Anclote Gas Conversion Project (Project 17.1).

3

4 **Q. What has been your role in the Anclote Gas Conversion Project?**

5 A. I transitioned into the role as Project Manager for the Anclote Gas Conversion
6 Project in late June 2012. I worked with Mr. Joel Moran, the initial Project
7 Manager, to ensure efficient transition. I am responsible for overall construction
8 management and review of engineering studies, schedules and estimates to
9 ensure the project is accurately defined, and an adequate timeline for the
10 execution of the project is allocated along with oversight of construction. In
11 addition, I work with others in the organization to lead internal contract planning
12 and strategy efforts, and work with supply change to contract boiler
13 modification work and balance of plant engineering services.

14

15 **Q: Did you review the Direct Testimony of Mr. Joel Moran filed in Docket. No**
16 **120007-EI on August 1, 2012?**

17 A: Yes.

18

19 **Q: In that testimony, Mr. Moran described the management structure used to**
20 **oversee implementation of the MATS – Anclote Gas Conversion Project.**

21 **Does that structure remain the same?**

22 A: Yes, essentially. The project is now in the construction phase. The management
23 structure of the project has been altered to oversee more personnel involved in

1 unit outages and fuel conversion work.

2

3 **Q: What is the current estimated cost for the Anclothe Gas Conversion Project?**

4 A: The Company currently estimates total project costs of \$94.3 million.

5

6 **Q: What was the original estimated cost for the Anclothe Gas Conversion**
7 **Project?**

8 A: The Company originally estimated and the Commission approved \$79.3 million
9 total project costs in Order No. PSC-12-0432-PAA-EI, Docket No. 120103-EI.

10

11 **Q: Please explain the variance between the \$79.3 million original estimate and**
12 **the current estimate of \$94.3 million.**

13 A: The \$15 million increase in total project costs is due to changes in the forced
14 draft (FD) fan systems. As Mr. Moran indicated in his August 1, 2012 direct
15 testimony in Docket No. 120007-EI, the \$79.3 million estimate was subject to
16 change based on the results of an ongoing engineering evaluation to determine
17 whether changes to the Anclothe units FD fan systems were needed. Specifically,
18 the changes would allow PEF to meet MATS compliance requirements while
19 maintaining current maximum output. PEF has completed the engineering
20 analysis and determined that the existing draft fans are not sufficient to maintain
21 maximum output. Therefore, some changes to the FD fan systems are required.
22 A decision on the appropriate option was made in late 2012 to enable the FD

1 fans to be installed in 2014. The changes consist of new fans, motors, variable
2 speed drives and two auxiliary transformers.

3

4 **Q: Why is it necessary to replace the FD fans?**

5 A: Switching from #6 fuel oil to natural gas slightly decreases boiler thermal
6 efficiency requiring additional boiler heat input to achieve the same electrical
7 output. The additional heat input is achieved by increasing fuel flow and
8 combustion air supplied by FD fans. After testing the existing FD fans and
9 considering options for increasing combustion air, PEF determined the existing
10 fans were not capable of providing sufficient air. Therefore, PEF decided that
11 the best technical solution is to replace the FD fans with larger units. Larger
12 fans require larger motors and unit auxiliary transformers.

13

14 **Q. Does the Anclote Gas Conversion Project remain on schedule to meet its**
15 **targeted in-service date?**

16 A. Yes, PEF continues to expect that both Unit 1 and Unit 2 will be fully converted
17 to natural gas in late 2013; however, installation of the FD fans will be not be
18 completed until early 2nd quarter 2014 due to long lead time involved to
19 purchase necessary equipment. PEF needed to conduct detailed engineering
20 analysis to verify that FD fan system installation would be an effective and
21 feasible solution, and the time needed to complete the analysis precluded
22 ordering equipment to support a 2013 installation. Each unit will be placed into

1 service as it is converted to natural gas; however, maximum output of each unit
2 cannot be achieved until the new FD fans are installed.

3

4 **Q: How did actual expenditures compare with PEF's estimated/actual**
5 **projections for 2012 in previous testimony and exhibits for the Anclote Gas**
6 **Conversion Project?**

7 A: The Company incurred \$25 million of project costs in 2012 compared to \$22
8 million of estimated costs. Such costs were incurred primarily for owner
9 furnished equipment (\$19 million) and engineering (\$3 million).
10 The difference between the \$25 million of incurred costs as of December 31,
11 2012 and \$22 million of estimated costs was due primarily to shifting some
12 engineering services planned for 2013 to 2012.

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14 **Q. Does this conclude your testimony?**

15 A. Yes.

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